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REMARKS

Claims 1, 3-10, and 12-19 are pending in this Application.

Claims 1, 3, 4, 12, and 15-19 stand rejected under 35 U.S.C. § 112, first paragraph.

Claims 1, 3, 4, 12, 15, and 19 stand rejected under 35 U.S.C. § 103(a) as being anticipated by Sugiyama et al. (US 2004/0129027, and hereinafter "Sugiyama") in view of Kim et al. (WO 2004/009501 as represented by US 2005/0016216, hereinafter "Kim"). Claims 16-18 stand rejected under 35 U.S.C. § 103(a) as being anticipated by Sugiyama in view of Kim, and further in view of Shimuzu et al. (US 2002/0148257, hereinafter "Shimuzu").

Applicants respectfully traverse these rejections in the following discussion.

I. THE CLAIMED INVENTION

The claimed invention (e.g., as defined by exemplary claim 1) is directed to a processing method of processing a glass base material for an optical fiber using a processing apparatus.

The processing apparatus includes a pair of rotatable chucks that directly or indirectly grasp respective ends of the glass base material in an axial direction of the glass base material and that are capable of performing relative displacement in an opposing direction, a burner for heating the glass base material that is movable along the axial direction of the glass base material being grasped, and at least one midway holding device that holds or supports at least one midway part of the glass base material.

The processing method includes processing the glass base material while preventing the glass base material from being brought into a cantilever state by always holding or supporting the glass base material at two or more points, and moving the at least one midway holding device to a vicinity of at least one rotatable chuck in an elongation process and not during a first phase of heating of the elongation process (e.g., see Application at page 10, lines 24-34).

Several exemplary advantages of the claimed invention as recited above are set forth in the originally-filed specification, for example, the ability to easily and safely perform a welding process and a spindle shape process without core deviation and without causing an

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accident of falling off of the glass base material (e.g., see Application at page 5, second paragraph).

II. THE 35 U.S.C. 112, FIRST PARAGRAPH REJECTION

In rejecting claims 1, 3, 4, 12, and 15-19, the Examiner alleges that the claims fail to comply with the written description requirement.

The Examiner alleges that the specification of the present application does not provide support for the claimed moving of the holding devices during an elongation process.

Applicants submit that the specification provides adequate teaching to reasonably convey to one skilled in the relevant art that the Applicants, at the time the application was filed, had possession of the claimed invention.

Applicants submit that support for the aforementioned feature of the claimed invention could be found at least on page 10, lines 7-11, and 19-34 of the specification.

Specifically, page 10, lines 7-11 provide that

"It is desirable that the midway holding device has such a structure as is movable in the direction of the axis of the glass base material ... so as to be moved aside to a safe area in the elongation process and the flame polishing process when the burner is operated back and forth the whole area."

Further, page 10, lines 19-25 disclose that

"...a single midway holding device would be sufficient. However, it is desirable to provide two or more midway holding devices in view of shifting the midway holding position from one point to another. According to this arrangement, it becomes possible to hold a long and large glass base material 1 at two or more midway points. The elongation process that shortens the diameter of the glass base material is performed by keeping the mentioned state."

Based on these explanations, it is clear that in some embodiments of the invention, the glass base material is held by the one or more midway holding devices during the entirety of elongation.

Finally, page 10, lines 25-28 of the specification describe an alternative embodiment:

"However, except during a first phase of heating where the movable headstock is not moved, it is not necessary to hold a midway part of the glass base material 1 because tensile stress is exerted in the

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lateral direction and so the possibility that the glass base material I hangs down is low" (emphasis added by Applicants).

Applicants note that, as indicated by the word "however," Applicants have chosen to define the "first phase of heating" as part of the "elongation process." Thus, the specification provides adequate teaching of moving the holding devices during the elongation process, specifically, during a part of the elongation process other than the "first phase of heating."

Accordingly, Applicants submit that as explained above, the specification provides adequate support for "*moving the at least one midway holding device to a vicinity of at least one rotatable chuck in an elongation process and not during a first phase of heating of the elongation process,*" as recited in claim 1.

Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

III. THE PRIOR ART REJECTIONS

In rejecting claims 1, 3, 4, 12, 15, and 19, the Examiner alleges that one of ordinary skill in the art would have combined Sugiyama with Kim to render obvious the claimed invention.

Applicants respectfully submit that the references would not have been combined as alleged by the Examiner and that, even if combined, the alleged combination of references would not teach or suggest each and every feature of the claimed invention.

That is, Sugiyama and Kim, either alone or in combination (*arguendo*) fail to teach or suggest, "*moving the at least one midway holding device to a vicinity of at least one rotatable chuck in an elongation process and not during a first phase of heating of the elongation process,*" (emphasis added by Applicants) as recited in claim 1.

Sugiyama's deficiencies with regard to claim 1 are clear and, as admitted by the Examiner, the alleged reference fails to teach or suggest the claimed moving.

The Examiner attempts to rely on Kim for making up the deficiencies of Sugiyama. The Examiner, however, is clearly incorrect.

Kim relates to a method for producing an optical fiber preform by modified chemical vapor deposition (MCVD). Recognizing that the steps taught by Kim are taken during a

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MCVD process, rather than an "elongation process," as claimed, the Examiner nevertheless argues that the combination of claimed features would have been obvious in view of Sugiyama and Kim. Specifically, the Examiner notes that Kim teaches the glass in an initial phase of heating is still rigid and the holding device is moved only after a first phase of heating, since the glass becomes soft and needs support, and argues that a similar scenario occurs in an elongation process.

Applicants submit that even assuming (arguendo) that the situation in Kim is in any way analogous to an elongation process, a teaching that support is needed when the glass becomes soft would tend to motivate the use of the holding device during the part of the elongation process, in which the movable headstock is moved.

In contrast, the claimed "moving" requires that the at least one midway holding device is moved "to a vicinity of at least one rotatable chuck," and hence not be used to hold the glass base material, during the elongation process, and not during a "first phase of heating," in which the movable headstock is not moved.

In other words, for at least some of the elongation process, during which the glass is soft, the midway holding device is not used. Therefore, to the extent that Kim suggests anything whatsoever about the use of the holding device during an "elongation process," the teachings of Kim tend to suggest a use of the holding device contrary to the claim language. Therefore, Kim fails to teach or suggest the aforementioned feature of the claimed invention.

Furthermore, Applicants submit that similar to Kim, Sugiyama does not relate to elongation, and thus is completely silent with respect to use or lack of use of a midway holding device during an elongation process. Therefore, Sugiyama fails to teach or suggest the above feature of the claimed invention.

Moreover, Applicants respectfully submit that these references are unrelated and would not have been combined as alleged by the Examiner. Thus, a person of ordinary skill in the art would not have considered combining these disparate references, absent impermissible hindsight.

Further, Applicants submit that there is no motivation or suggestion in the references or elsewhere (and thus no predictability for one of ordinary skill in the art) to urge the combination as alleged by the Examiner. Indeed, these references clearly do not teach or suggest their combination. Therefore, Applicants respectfully submit that one of ordinary

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skill in the art would not have combined the references as alleged by the Examiner.

Therefore, Applicants respectfully submit that one with ordinary skill in the art would not have combined Sugiyama with the teachings of Kim, and even if combined, the alleged combination does not teach or suggest (or render obvious) each and every feature of the claimed invention. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Moreover, in rejecting claims 16-18, the Examiner alleges that one of ordinary skill in the art would have combined Sugiyama and Kim with Shimuzu to render obvious the claimed invention.

Applicants respectfully submit, however, that the references would not have been combined as alleged by the Examiner and that, even if combined, the alleged combination of references would not teach or suggest each and every feature of the claimed invention.

Applicants respectfully traverse this rejection, at least because Shimuzu is not cited as remedying the aforementioned deficiencies of Sugiyama and Kim.

Indeed, Shimuzu is merely cited for allegedly disclosing welding of dummy rods. Thus, claims 16-18 is allowable for at least the same reasons that the underlying base claim is allowable.

Furthermore, Applicants submit that that even if the alleged references were considered in further view of conventional elongation methods, for example, by combining the use of a holding device prior to elongation as taught by Kim or Sugiyama with an elongation process making no use of a holding device such as Shimuzu, the combination of claimed features would not have been obvious.

That is, arriving at the combination of claimed features including the claimed "moving" would require the unobvious recognition that the tensile stress exerted in the lateral direction during elongation is enough to prevent deformation without the use of a midway holding device (e.g., see specification at page 10, lines 25-28). Thus, a person of ordinary skill in the art would not have considered combining these disparate references, absent impermissible hindsight.

Therefore, Applicants respectfully submit that one with ordinary skill in the art would not have combined Sugiyama and Kim with the teachings of Shimuzu, and even if combined, the alleged combination does not teach or suggest (or render obvious) each and every feature

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of the claimed invention. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

IV. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicants submit that claims 1, 3, 4, 12, and 15-19, all the claims presently under examination, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 09/02/10

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